August 2015

Thorne/Williams Wildlife Research Center

Veterinary Services Staff

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Wildlife Biologist: Cole Hansen

Biologist: Sam Lockwood

Intern: Sierra Amundson

Construction Continues

As our 2015 bighorn sheep research study came to a close, we here at the TWRC have re-focused our energy on completing construction of our new sheep handling facility. The interior of the building is now insulated, sheet rocked and ready for the alleyways and chutes to be built. This part of the building phase is one that we are all looking forward to as it will be something new and sure to get our creative juices flowing. Plans are already underway for next year's bighorn sheep

Sheep handling facility progress.

Sierra supports a bighorn ewe that was sedated for hoof trimming

Hand –reared elk calves at Sybille. These calves have genetics that can give them a prolonged life in the face of chronic wasting disease.

Farewell to Sierra

With the end of the summer drawing near, we had to say farewell to our intern, Sierra Amundson, as she left to start college last week. Sierra has spent the past two summers working closely with our bighorn sheep at the TWRC. We all want to say thank you to Sierra for her hard work and positive attitude over the last two summers and also wish her luck on starting this new chapter in her life. THANK YOU SIERRA.

Wildlife Disease Laboratory

Tularemia Unusually Active in Wyoming This Year

Common host of F. tularensis

Tularemia has been unusually active this year with 12 human cases of the disease and one fatality in Bighorn County so far. Tularemia is relatively common across the entire state, but we normally see only two to three human cases of the disease each year. Below are some quick facts about tularemia

Agent: *Francisella tularensis* – A hardy bacteria that survives well in damp/wet soil

Hosts: Rabbits, muskrats, beavers and squirrels are the primary carriers; however, many species can become infected.

Transmission: Bites from infected ticks and biting flies are the most common method of transmission. Other methods of transmission include: ingesting contaminated water, or undercooked meat, direct contact with an infected animal, or inhaling bacteria that may be present in contaminated dust or animal material.

Human Health: Symptoms include: swollen and painful lymph glands, fever, chills, headache, muscle aches, joint pain, dry cough, and progressive weakness. A skin ulcer commonly forms at the site of the insect bite and is frequently accompanied by swelling of regional lymph glands, usually in the armpit or groin.

Prevention for Hunters:

- Use an insect repellent that is effective against ticks, biting flies and mosquitoes (e.g. DEET), and wear light colored clothing so that ticks are easier to spot.
- Avoid handling sick wildlife.
- Avoid drinking unpurified water from streams or lakes.
- Wear gloves when field dressing any harvested animal.
- Cook meat thoroughly before consumption, especially rabbits, muskrats, beaver or other rodents.

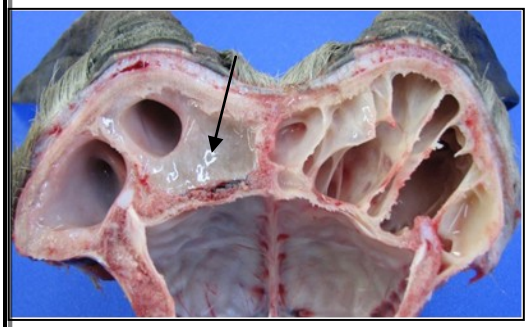
Additional sources of information:

Field Guide to Diseases of Wyoming Wildlife Page 176-178

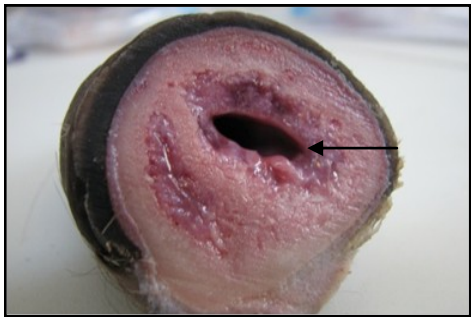
CDC website: http://www.cdc.gov/tularemia/index.html

Bighorn Sheep Sinus Tumors

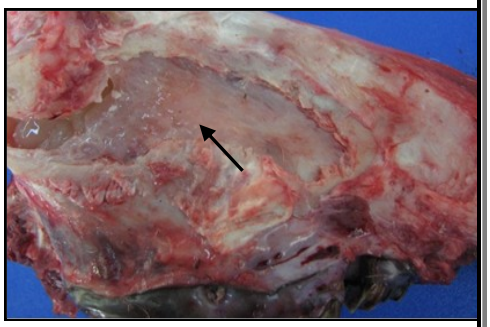
Veterinary Services has recently initiated an effort to survey for sinus tumors in the State's bighorn sheep herds. Collection kits were distributed to several taxidermists with a request that they save the capped skulls (rather than tossing them in the trash) so that we can examine them for evidence of sinus tumors. These tumors grow within the skull sinuses of the horns, forehead, and above the teeth. We are interested in them because of their ability to cause skull and horn deformities as well as their potential to contribute to respiratory disease. In order to detect nasal tumors, the skull must be sectioned with a band saw to look for the growths. Last year we detected the first nasal tumor in the Absaroka herd unit near Cody.



Sinus tumor in the forehead



In the horn



Above the teeth

Wildlife Necropsy Summary

Twenty-five wildlife cases were submitted for diagnostics in August.

Species	Date Received	County	Diagnosis
Pronghorn	8/4/2015	Carbon	Undetermined
Cottontail Rabbit	8/3/2015	Laramie	Pending
Cottontail Rabbit	8/4/2015	Weston	Pending
Common Grackle	8/5/2015	Albany	Pending
Common Grackle	8/5/2015	Albany	Pending
Common Grackle	8/5/2015	Albany	Pending
Cottontail Rabbit	8/5/2015	Natrona	Pending
Elk	8/7/2015	Sheridan	GI parasitism
Peregrine Falcon	8/10/2015	Albany	West Nile Virus
Chipmunk	8/10/2015	Laramie	Undetermined, tularemia negative
Mule Deer	8/11/2015	Carbon	Adenovirus Hemorrhagic Disease
Pronghorn	8/11/2015	Albany	Pending
Pronghorn	8/17/2015	Albany	Pending
Red-tailed Hawk	8/12/2015	Sheridan	West Nile Virus
Pronghorn	8/13/2015	Carbon	Undetermined
Cottontail Rabbit	8/14/2015	Platte	Coccidiosis
Northern Harrier	8/20/2015	Park	Leucocytozoonosis
White-tailed deer	8/20/2015	Platte	Undetermined
Cottontail Rabbit	8/24/2015	Albany	Undetermined, tularemia negative
Trumpeter Swan	8/21/2015	Teton	Pending
Trumpeter Swan	8/21/2015	Teton	Pending
Trumpeter Swan	8/21/2015	Teton	Pending
Mule Deer	8/25/2015	Natrona	Pending
Pronghorn	8/27/2015	Weston	Pending
Golden Eagle	8/27/2015	Sheridan	Pending

Case of the Month – West Nile Virus

Wyoming Game and Fish personnel in Sheridan responded to a call regarding a sick red-tailed hawk that was unable to stand, but otherwise appeared healthy. Unfortunately the bird's condition rapidly deteriorated and it had to be euthanized. Laboratory testing reveled this hawk was infected with West Nile virus (WNV). In a similar circumstance, a peregrine falcon was captured the same day just south of Laramie. This bird exhibited the same clinical signs as the red-tailed hawk in Sheridan, but it soon died in captivity. Diagnostic testing found this falcon to also be infected with WNV.

The occurrence of WNV positive birds from widely disparate locations in Wyoming reinforce the fact this disease is endemic across the state. Severity of outbreaks will vary year to year depending upon factors such as temperature, precipitation, and immunity of susceptible species.

Sick raptor